TASK ORDER (TO)

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Open Architecture, Intelligence, Surveillance and Reconnaissance Engineering Services (OA ISR ES) Bridge

in support of:

Air Force Research Laboratory, Information Handling Branch

Issued to:
Booz Allen Hamilton Inc.
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The Federal Systems Integration and Management Center (FEDSIM)
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C.1 BACKGROUND

The Air Force Research Laboratory, Information Handling Branch (AFRL/RIEB) is the lead AFRL organization providing programmatic and technical support for research and development, design, prototyping, demonstration, modeling, evaluation, test, migration, installation, and transition for Air Force (AF) Intelligence, Surveillance, and Reconnaissance (ISR) intelligence systems and programs in support of numerous Major Commands (MAJCOMs), Intelligence Community (IC), and AFRL/RIEB programs and initiatives.

AFRL/RIEB provides the following services to its clients:

a. Information Assurance and Assessment (IA&A): As part of this capability, AFRL/RIEB is an Agent of the Security Control Assessor (ASCA), licensed by Headquarters (HQ) AF Space Command (AFSPC) Security and Mission Assurance Division (AFSPC A3/6CM) to provide fact-based risk assessments of AF and ICs systems. AFRL/RIEB assists programs through the Assessment and Authorization (A&A) process, which includes the transition from the Department of Defense (DoD) Information Assurance (IA) Certification and Accreditation (C&A) Process (DIACAP) to Risk Management Framework (RMF).
b. Test and Evaluation (T&E): As part of this capability, AFRL/RIEB provides Lab-Based Security Assessment (LBSA), Functional and Security Testing (FaST), and Software Assurance Penetration Testing, to name a few.
c. Tech Assessment (TA): As part of this capability, AFRL/RIEB provides Cybersecurity Engineering, IA T&E services, and A&A support to DoD Programs. As an IA focused extension of programs, Integration Test and Evaluation Center (ITEC) submits RMF packages and software assessments to obtain Interconnection Security Agreements (ISA), Interim Authorities to Test (IATT), Certificate to Field (CtF), Authority to Operate (ATO), and Security Impact Assessments (SIA).
d. Software Development: As part of this capability, AFRL/RIEB provides the full spectrum of software development to rapidly advance ISR capabilities for the DoD and IC.

C.1.1 PURPOSE

The purpose of this TO is to provide the AFRL/RIEB and its clients with specialized Information Technology (IT) Engineering Services (ES) and analytical support within the ISR domain. This support includes a broad range of services and IT engineering support in the following domains:

a. Intelligence Analysis.
b. Requirements Analysis.
c. Solutions Analysis.
d. Operational and Technical Assessment.
e. Operational Architecture Analysis.
f. Systems Engineering.
g. Configuration and Database Management.
h. Life-cycle engineering of systems through certification.

C.1.2 AGENCY MISSION

AFRL/RIEB mission is to deliver superior technological advantage to the warfighter through agile IT innovation, research, development, and transition, and sustain advanced IT solutions to provide timely and secure intelligence information access, analysis, and dissemination for National Defense and IC decision makers at all echelons.

AFRL/RIEB is the number one ASCA for AF Enterprise Authorizing Official (AO) and the AF Space Authorizing Official (AO). Additionally RIEB is considered the "Gold Standard" for Lab Based Security Assessments (LBSA) DoD Secret and Below Interoperability (SABI) environments. The AFRL/RIEB currently supports numerous agencies and MAJCOMs within DoD and numerous members of IC.

C.2 SCOPE

The scope of this TO includes technical support for intelligence analysis, specialized IT requirements analysis, solution analysis, engineering operational and technical assessment, operational architecture analysis, IT systems engineering, configuration and database management, and life-cycle engineering of systems through certification and fielding. Specifically, emphasis is on integration of requirements across the enterprise including incorporating emerging sensors into the Distributed Common Ground System (DCGS) global Processing, Exploitation, and Dissemination (PED) architecture, or managing integration between DCGS and mission partners, such as the Air Operations Center (AOC) or other Intelligence producers.

C.2.1 SUPPORTED AGENCIES

This TO will support AFRL/RIEB and its clients, which include all 10 Combatant Commands (COCOMs), the numerous MAJCOMs and ICs. The list of supported clients fluctuates based on the COCOMs, MAJCOMs, ICs, and AF organizations testing and IA needs.

AFRL/RIEB currently supports the following MAJCOMs and AF organizations:

a. Secretary of the AF (SAF)
b. Air Combat Command (ACC)
c. AF Space Command (AFSPC)
d. AF Materiel Command (AFMC)
e. AF Reserve Command (AFRC)
f. AF Global Strike Command (AFGSC)
g. United States (U.S.) Central Command (USCENTCOM)
h. U.S. Special Operations Command (USSOCOM)
i. U.S. Strategic Command (USSTRATCOM)
j. U.S. Transportation Command (USTRANSCOM)
k. U.S. Indo-Pacific Command (USINDOPACOM)

AFRL/RIEB currently supports the following ICs:

a. National Security Agency (NSA)
b. Defense Intelligence Agency (DIA)

c. National Reconnaissance Organization (NRO)
d. National Geospatial-Intelligence Agency (NGA)

C.3 CURRENT INFORMATION TECHNOLOGY (IT)/NETWORK ENVIRONMENT

The AF Intelligence Data Handling System (IDHS) is an ISR intelligence system that supports imagery exploitation; Electronic Intelligence (ELINT) analysis; Command, Control, Communications Information (C3I) analysis; order of battle determination; and intelligence production for strategic forces. The IDHS, deployed to Seventh AF in support of operations in Southeast Asia, became operational in 1968. By 1986 the Strategic Air Command (SAC) IDHS computer data processor allowed SAC to process greater amounts of data in a shorter time. IDHS is the primary repository of all data required to analyze and maintain information necessary to support normal operations and to adequately respond to a crisis situation. It provides access to the USCENTCOM/USSOCOM Integrated Data System (CSIDS/IDB), DIA, AF DCGS, and Military Intelligence Information Data System Integrated Data System (MIIDS/ITB). IDHS and DCGS are passive intelligence systems.

Individual system specification and applicable IT environments will be provided with Work Plans (WPs).

C.4 OBJECTIVE

The objectives of this TO are:

a. Technical Services: Provide life-cycle systems engineering support for ISR Programs; evaluate system designs and developed software; review software installation plans; provide hardware and software configuration review at Government designated sites; and provide test services from Development through CtF and ATO.
b. Intelligence Systems Analysis: Provide support services for assessment and analysis and compare concepts and/or alternatives and implement prototypes to show validity of concept to support ISR requirements solutions.
c. Engineering Operations and Maintenance (O&M): Provide general O&M and administration of data and information components, products, or systems including engineering to address O&M problems.
d. Innovative IT solutions: Provide innovative solutions to deliver quality software in a timely, effective, and cost-effective manner.

The contractor shall provide a service to meet the task requirements below, as well as a solution that will meet the future and rapidly advancing requirements as the environment evolves and changes. These services include, but are not limited to, modifying, changing, advancing, replacing, supplementing, and enhancing services, applications, tools, and other supporting capabilities over time with rapid development and implementation.

The Government will make every effort to give the contractor seven to ten calendar days advance notice of new requirements, but the dynamic and unpredictable nature of the ISR environment dictates that emergent requirements can and will occur with little or no advance notice. The contractor shall be prepared to respond rapidly to such requirements as they are identified throughout the course of performance. The contractor shall be flexible as the portfolio of projects, testing response time, team size, and skills required may change regularly due to

mission customer requirements, AFRL/RIEB priorities, or budget adjustments. The contractor shall modify and scale its staff to ensure that an adequate number of resources with the appropriate skill mix are deployed in order to effectively adapt to the changes that may occur throughout the life of the Open Architecture (OA) ISR ES TO.

C.5 TASKS

The major task areas of this TO are:

a. Task 1 – Program Management Services
b. Task 2 – Enterprise Systems Management and Planning Services
c. Task 3 – Analysis of Alternatives/Design Services
d. Task 4 – System Development and Enhancement Services
e. Task 5 – System/Software Installation Planning and Implementation Services
f. Task 6 – IA&A Support Services
g. Task 7 – IT System(s)/Software ES
h. Task 8 – System Testing Services
i. Task 9 – Familiarization/Coaching Services
j. Task 10 – Engineering O&M Services

As part of this TO, the contractor may be tasked with acquiring Government-approved software and/or hardware incidental to the enhancement, design, and development, to support system requirements; development, enhancement, or demonstration of prototypes; or system development and/or enhancement (e.g., testing and prototyping) activities. In these instances, the contractor shall provide applicable license, maintenance, and diagnostics support software and all applicable arrangements for delivery of such hardware, software, and licenses to Government-designated sites.

C.5.1 TASK 1 – PROGRAM MANAGEMENT SERVICES

The contractor shall provide program management support under this TO. This includes the management and oversight of all activities performed by contractor personnel, including subcontractors, to satisfy the requirements identified in this Performance Work Statement (PWS).

The Government will utilize a Quality Assurance Surveillance Plan (QASP) to monitor CPFF tasks (Section J, Attachment D).

C.5.1.1 SUBTASK 1 – ACCOUNTING FOR CONTRACTOR MANPOWER REPORTING

The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the AFRL/RIEB via a secure data collection site: the Enterprise Contractor Manpower Reporting Application (ECMRA). The contractor shall completely fill in all required data fields using the following web address: http://www.ecmra.mil/.

Reporting inputs will be for the labor executed during the period of performance during each Government Fiscal Year (FY), which runs October 1 through September 30. While inputs may

be reported any time during the FY, all data shall be reported No Later Than (NLT) October 31 of each calendar year. Contractors may direct questions to the support desk at: http://www.ecmra.mil/.

Contractors may use Extensible Markup Language (XML) data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a contractor's systems to the secure web site without the need for separate data entries for each required data element at the website. The specific formats for the XML direct transfer may be downloaded from the web.

For data reporting purposes the following is provided to ensure accuracy:

a. Command of the Requiring Activity that would be performing the mission if not for the contractor: LK1MFSD1
b. Requiring Activity UIC code: FFSD10
c. FSC/PSC code: D314

C.5.1.2 SUBTASK 2 – COORDINATE A PROJECT KICK-OFF MEETING

The contractor shall schedule, coordinate, and host a Project Kick-Off Meeting at a location approved by the Government (Section F, Deliverable 2). The meeting will provide an introduction between the contractor personnel and Government personnel who will be involved with the TO. The meeting will provide the opportunity to discuss technical, management, and security issues, and travel authorization and reporting procedures. At a minimum, the attendees shall include Key contractor Personnel, representatives from the directorates, AFRL/RIEB Technical Point of Contact (TPOC), other relevant Government personnel, and the FEDSIM Contracting Officer's Representative (COR).

At least three days prior to the Kick-Off Meeting, the contractor shall provide a Kick-Off Meeting Agenda (Section F, Deliverable 1) for review and approval by the FEDSIM COR and the AFRL/RIEB TPOC prior to finalizing. The agenda shall include, at a minimum, the following topics/deliverables:

a. Points of contact (POCs) for all parties.
b. Personnel discussion (i.e., roles and responsibilities and lines of communication between contractor and Government).
c. Staffing Plan and status.
d. Transition-In Plan (Section F, Deliverable 6) and discussion.
e. Security discussion and requirements (i.e., building access, badges, Common Access Cards (CACs)).
f. Invoicing requirements.
g. Program Management Plan (PMP) (Section F, Deliverable 7).
h. Quality Management Plan (QMP) (Section F, Deliverable 8).

The Government will provide the contractor with the number of Government participants for the Kick-Off Meeting, and the contractor shall provide sufficient copies of the presentation for all present.

The contractor shall draft and provide a Meeting Minutes Report (Section F, Deliverable 5) documenting the Kick-Off Meeting discussion and capturing any action items.

C.5.1.3 SUBTASK 3 – PREPARE A MONTHLY STATUS REPORT (MSR)

The contractor shall develop and provide an MSR (Section J, Attachment F) (Section F, Deliverable 3). The MSR shall include the following:

a. Activities during reporting period, by task (include ongoing activities, new activities, and activities completed, and progress to date on all above mentioned activities). Each section shall start with a brief description of the task.
b. Problems and corrective actions taken. Also include issues or concerns and proposed resolutions to address them.
c. Staffing Plan that includes initial filling of billets as well as ongoing contingencies to handle personnel turnover and areas of shortfall; include personnel gains, losses, and status (security clearances, etc.).
d. Government actions required.
e. Schedule (show major tasks, milestones, and deliverables; planned and actual start and completion dates for each).
f. Summary of trips taken, conferences attended, etc. (attach Trip Reports to the MSR for reporting period).
g. Updates to property management for contractor's listing/database of Government-Furnished Property (GFP) to assure the accuracy and status of all GFP.
h. Cost and schedule comparison data/monthly performance reports.
i. WP reports
j. Metrics on problem areas such as failed tests, etc., whether identified by the Government or the contractor.

C.5.1.4 SUBTASK 4 – PREPARE A CONTRACT FUNDS STATUS REPORT (CFSR)

The contractor shall develop and provide a CFSR (Section F, Deliverable 9). The CFSR shall include the following:

a. Actual (current month) expenditure, total expenditures at the TO level, and average expenditure rate.
b. Three-month projected costs of each CLIN.

C.5.1.5 SUBTASK 5 – CONVENE AND SUPPORT TECHNICAL STATUS MEETINGS/CONFERENCES/QUARTERLY IN-PROGRESS REVIEWS

The contractor Program Manager (PM) shall convene monthly Technical Status/Quarterly In-Progress Review Meetings with the AFRL/RIEB TPOC, FEDSIM COR, and other Government stakeholders (Section F, Deliverable 4). The purpose of the technical status meeting is to ensure all stakeholders are informed of the monthly activities and MSR, provide opportunities to identify other activities and establish priorities, and coordinate resolution of identified problems or opportunities. The purpose of the quarterly in-progress review meetings is to review/assess contractor's performance. The contractor PM shall provide minutes of these meetings, including attendance, issues discussed, decisions made, and action items assigned, to the FEDSIM COR (Section F, Deliverable 5).

The contractor shall provide conference and presentation capabilities, as approved by the Government, to allow for the presentation of prototypes, technical program information, and

issues. The contractor shall manage and address all aspects of coordinating, acquiring (i.e., booth rentals, supplies, multimedia, and displays), and configuring space to perform the required demonstration and/or presentation. As part of the conference/presentation, activities may include:

a. Professional development seminars.
b. Demonstrations.
c. Trade shows.
d. Conferences and briefings relating to enterprise-wide integration issues or programs (e.g., Department of Defense Intelligence Information System (DoDIIS) Worldwide Conference, GeoInt Symposium, the National Cross-Domain Services Management Office (NCDSMO), and user conferences).

C.5.1.6 SUBTASK 6 – PREPARE AND UPDATED PROJECT MANAGEMENT PLAN (PMP)

The contractor shall document all support requirements in a PMP. The contractor shall provide the Government with a draft and final PMP (Section F, Deliverable 7) on which the Government will make comments. The PMP shall incorporate the Government's comments.

The PMP shall:

a. Describe the proposed management approach and shall define the proposed organizational structure (including responsibilities and reporting structure), how personnel will be assigned throughout the contractual period, and how the proposed project team will interface with both the contractor's corporate structure and the Government command structure.
b. Contain detailed Standard Operating Procedures (SOPs) for all tasks including property management (see section H.2).
c. Include milestones, tasks, and subtasks required in this TO.
d. Provide for an overall Work Breakdown Structure (WBS) with a minimum of three levels and associated responsibilities and partnerships between Government organizations.
e. Describe in detail the contractor's approach to risk management under this TO.
f. Describe in detail the contractor's approach to communications including processes, procedures, communication approach, and other rules of engagement between the contractor and the Government.
g. Include a staffing plan.
h. Include the contractor's Baseline QMP

C.5.1.7 SUBTASK 7 – PREPARE TRIP REPORTS

The Government will identify the need for a Trip Report when the request for travel is submitted (Section F, Deliverable 10). The contractor shall keep a summary of all long-distance travel including, but not limited to, the name of the employee, location of travel, duration of trip, and POC at travel location. Trip reports shall also contain Government approval authority, total cost of the trip, a detailed description of the purpose of the trip, and any knowledge gained. At a minimum, trip reports shall be prepared with the information provided in Section J, Attachment G.

C.5.1.8 SUBTASK 8 – PROVIDE INFORMATION, DOCUMENTATION AND DATA MANAGEMENT

The contractor shall establish, maintain, and administer an integrated data management system for collection, control, publishing, and delivery of all program documents. The data management system shall include but not be limited to the following types of documents:

a. Deliverables
b. White Papers
c. Status Reports
d. Audit Reports
e. Agendas
f. Presentation Materials
g. Meeting Minutes
h. TO documents
i. Hardware/Software (HW/SW) market research
j. Contract Letters and TO Proposals
k. User Manuals

The contractor shall provide the Government with electronic access to this data, including access to printable reports.

The contractor shall provide collection, creation, organization and distribution of TO related information and materials. Materials managed may include software licenses, TO documents; other program related items, and required data such as hardware and software market research. The contractor personnel may be required to handle Privacy Act and For Official Use Only (FOUO) information.

The contractor shall provide control, management, and distribution of program related information and products. The contractor shall ensure all items have appropriate control markings including Scientific and Technical Information (STINFO), export control, and classification. The process shall support the collection and distribution of information on dissimilar security, control networks, media, and environments (e.g., Non-classified Internet Protocol (IP) Router Network (NIPRNet), Secret IP Router Network (SIPRNet), and Joint Worldwide Intelligence Communications System (JWICS)). The contractor shall be in compliance with all governing directives and policies.

All physical records, files, documents, and work papers that are provided and/or generated by the Government and/or generated for the Government in performance of this TO, shall be maintained by the contractor and transferred or released to the Government or successor contractor, and it will become and remain Government property and will be maintained and disposed of In Accordance With (IAW) AF Manual (AFMAN) 33-363, Management of Records; AF Instruction (AFI) 33-364, Records Disposition – Procedures and Responsibilities; Federal Acquisition Regulation (FAR); and/or Defense Federal Acquisition Regulation Supplement (DFARS), as applicable. Nothing in this section alters the rights of the Government or the contractor with respect to patents, data rights, copyrights, or any other intellectual property or proprietary information as set forth in any other part of this PWS or the Application Services

contract of which this TO is a part (including all clauses that are or will be included or incorporated by reference into that contract).

The contractor shall provide documentation for all systems services delivered under this TO. The contractor shall provide all manuals and documentation IAW best commercial practices (e.g., CD-ROM, etc.). This documentation will include users' manuals, operators' manuals, maintenance manuals, and network and application interfaces (Section F, Deliverable 11).

C.5.1.9 SUBTASK 9 – PROVIDE QUALITY MANAGEMENT

The contractor shall identify and implement its approach for providing and ensuring quality throughout its solution to meet the requirements of the TO. The contractor's QMP shall describe the application of the appropriate methodology (i.e., quality control and/or quality assurance) for accomplishing TO performance expectations and objectives. The QMP shall describe how the appropriate methodology integrates with the Government's requirements and ensure that all assigned products meet design, format, functional, and performance requirements.

The contractor shall provide a QMP as required in Section F, Deliverable 8. The contractor shall periodically update the QMP, as changes in program processes are identified. The contractor shall fully discuss its validated processes and procedures that provide high-quality performance for each Task Area. The QMP shall describe how the processes integrate with the Government's requirements.

The contractor's performance will be assessed quarterly by a process that measures success towards achieving defined performance objectives.

C.5.1.10 SUBTASK 10 – TRANSITION-IN

The contractor shall provide a Transition-In Plan (Section F, Deliverable 6) NLT five calendar days after award.

The contractor shall ensure that there will be minimum service disruption to vital Government business and no service degradation during and after transition.

The contractor shall implement its Transition-In Plan NLT seven calendar days after award, and all transition activities shall be completed no more than 30 calendar days after award.

C.5.1.11 SUBTASK 11 – TRANSITION-OUT

The contractor shall provide transition-out support when required by the Government. The Transition-Out Plan shall facilitate the accomplishment of a seamless transition from the incumbent to incoming contractor/Government personnel at the expiration of the TO. The contractor shall provide a draft Transition-Out Plan NTL 90 days prior to expiration of the Order Period (Section F, Deliverable 13). The Government will work with the contractor to finalize the Transition-Out Plan (Section F, Deliverable 14) in accordance with Section E. In the Transition-Out Plan, the contractor shall identify how it will coordinate with the incoming contractor and/or Government personnel to transfer knowledge regarding the following:

a. Project management processes.
b. POCs.
c. Location of technical and project management documentation.

d. Status of ongoing technical initiatives.
e. Appropriate contractor-to-contractor coordination to ensure a seamless transition.
f. Transition of Key Personnel.
g. Schedules and milestones.
h. Actions required of the Government.

The contractor shall also establish and maintain effective communication with the incoming contractor/Government personnel for the period of the transition via weekly status meetings or as often as necessary to ensure a seamless transition-out.

Upon delivery of the final version release or other deliverable under this TO, the contractor shall deliver to the FEDSIM COR, the following:

a. All procedures to move modules to test/production environments, maintenance procedures, reference materials, technical documentation, user manuals, training and/or classroom materials, and all other related documentation.
b. All source code (fully compliant package), libraries, database tables, scripts, resources, modules, and all other related materials on the Government system and all software code.
c. Documentation to include system architecture diagrams, configuration management procedures (including creating new modules, modifying code, testing, production releases, version control, etc.), system administrator procedures, database structure documentation, and data dictionary.

C.5.1.12 SUBTASK 12 – TO SECURITY MANAGEMENT

The contractor shall appoint a security manager for the on-base, long-term visitor group. The security manager may be a full-time position or an additional duty position. The security manager shall provide contractor employees with training required by DoD Manual (DoDM) 5200.01, Volume 3, Enclosure 5, DoD Information Security Program; AG Policy Directive (AFPD) 31-4, Information Security; and AFI 31-401, Information Security Program Management. The contractor security manager shall provide initial and follow-on training to contractor personnel who work in AF controlled or restricted areas. AF restricted and controlled areas are explained in AFI 31-101, AF Integrated Defense Plan.

The contractor shall manage all aspects of security associated with performance including personnel security access, security clearance information preparation, and liaison with Government POCs for security related items. The contractor shall capture and maintain information regarding all contract personnel and security related data. The personnel information maintained and provided to the FEDSIM COR shall include the following:

a. All personnel performing under the TO.
b. Personnel security clearance levels.
c. Sponsors.
d. Dates for performance.
e. Government identification materials (i.e., Common Access Cards (CACs) and agency badges).

The contractor shall provide information supporting visit requests, CACs, personnel clearance, and other security-related activities. The contractor shall provide softcopy and hardcopy of

managed information assuring proper privacy markings and controls are utilized (Section F, Deliverable 12).

C.5.2 TASK 2 – ENTERPRISE SYSTEMS MANAGEMENT AND PLANNING SERVICES

The contractor shall provide policy, technical, and programmatic analyses/planning activities and IT technical ES to support high-level management's strategic, tactical, and operational plan development and implementation. As part of this task, the contractor shall provide technical expertise to support Government-sponsored Technical Exchange Meetings (TEMs). The contractor shall participate in TEMs and reviews (e.g., system reviews, program/project reviews, site visits, working groups, functional and physical configuration audits, configuration control boards, and user groups) and provide associated documentation (i.e., meeting minutes and technical discussions for future reference) (Section F, Deliverable 5).

C.5.2.1 SUBTASK 1 – ANALYSES AND RESEARCH

The contractor shall conduct requirements and policy/guidance analyses.

The contractor shall:

a. Provide impact analysis of enterprise new and existing requirements (Section F, Deliverable 15).
b. Provide analysis for policy and guidance changes as identified by the Government (Section F, Deliverable 15).
c. Provide an analysis of high-level integration issues between projects and technical input to planning including consideration for planning, requirements definition, engineering, solution fielding, training, operations, and customer support (Section F, Deliverable 15).
d. Provide technical analysis and dependency identification to refine Government identified requirements and decompose analysis into program level requirements (Section F, Deliverable 15).
e. Research and investigate technologies, approaches, and concepts with potential use as solutions to identified issues including improving system capabilities (Section F, Deliverable 17).

C.5.2.2 SUBTASK 2 – EVALUATION OF TECHNICAL IMPACTS

The contractor shall provide technical ES for ongoing support to new and existing programs (Section F, Deliverable 15). As part of this subtask the contractor shall:

a. Evaluate the technical impacts of new and existing requirements including policy, guidance, and infrastructure changes.
b. Provide technical recommendations to address changes and their impacts across strategic, tactical, and operational planning including consideration for policy, directives, requirements definition, engineering, solution fielding, training, operations, and customer support.
c. Develop modernization strategies and integrated mission area plans for ISR support plans and associated documents.

C.5.2.3 SUBTASK 3 – INTEGRATION PLANNING OF NEW HW/SW CAPABILITIES AND/OR BASELINES

The contractor shall provide analysis of new (proposed) and existing technologies/capabilities including consideration of national systems impacts, interface control requirements, and impacts on functional analysis capabilities. Additionally, the contractor shall develop recommendations related Concept of Operations (CONOPS); roadmaps; Tactics, Techniques, and Procedures (TTP); operational architectures; strategic plans; implementation plans; and action plans (Section F, Deliverable 18). The contractor shall:

a. Document ranked recommendations for integration strategy(s) based on technical compliance and impacts along with other technical parameters provided by the Government in WPs.
b. Develop designated integration/migration strategy(s).
c. Identify, verify, and provide requirements traceability for new HW/SW capabilities and/or baselines.

C.5.2.4 SUBTASK 4 – PROGRAMMATIC PLANNING

The contractor shall identify, verify, and provide detailed descriptions of programmatic shortfalls, needs, or required changes to the program or system. This may include database design activities (logical and physical), applications software design and development, or technology insertion activities (document/demonstrate) (Section F, Deliverable 15).

C.5.3 TASK 3 – ANALYSIS OF ALTERNATIVES/DESIGN SERVICES

The contractor shall review and evaluate system designs to ensure user and functional requirements are satisfied in a sound technical and cost effective manner. The contractor shall ensure that system designs being reviewed address software requirements, hardware requirements, network requirements, security requirements, personnel requirements, and facility requirements. The contractor shall ensure the designs conform to Government and Industry Standards and best practices are consistent with unique User, service, command, or community oriented policies and procedures.

C.5.3.1 SUBTASK 1 – ENTERPRISE SYSTEMS DESIGN

The contractor shall review, analyze, and provide system designs based on Government-provided constraints which will be identified in individual WPs and contractor developed design information (Section F, Deliverable 15). The contractor shall review, analyze, and document that:

a. Designs are applicable to a single site, to multiple sites, or other Government specified environment.
b. Designs (when applicable) address hardware, software, databases, visualization, documentation, environmental constraints, policy and directives, and security and documentation.
c. Designs conform to Government and Industry Standards and best practices and Modular Open Systems Approach (MOSA) principles in support of Service Oriented Architecture (SOA) and Enterprise Architectures (EA) as specified in individual WPs.

d. Designs are reviewed for compatibility with interfaces to existing systems, easily integrated into existing systems, scalable, and shall be easily tailored to meet individual site requirements.

C.5.3.2 SUBTASK 2 – DATABASE/INFORMATION STANDARDS

The contractor shall monitor and analyze the ongoing design and development progress of the systems for development of community of interest standards and potential impacts to program initiatives (Section F, Deliverables 5, 16, and 17).

As part of this task the contractor shall:

a. Attend and participate in various technical reviews and working groups, review available documentation, and document potential issues and proposed strategies for solution.
b. Provide analysis that includes all information defined by data plans/dictionaries and be consistent and compliant with data standards, naming conventions, and logical rules.
c. Support compartmentalization of data, based on classification/caveats.
d. Be consistent with approved DOD standard data modeling efforts.
e. Automate data exchange applications between data repositories and analysis tools.

C.5.4 TASK 4 – SYSTEM DEVELOPMENT AND ENHANCEMENT SERVICES

The contractor shall develop new and enhance existing software based Government requirements. As part of this task the contractor shall provide technical and engineering development services that may consist of coding, engineering development to validate and demonstrate a design, as well as final system development for tools and infrastructure (Section F, Deliverable 30).

As part of this task the contractor shall:

a. Respond/resolve items identified in Problem Report and Change Request (PR/CR) PR/CR WP and assess/verify that solution(s) meet the requirements and solve the problem(s). The contractor shall provide an assessment on impacts to system performance, security impacts, and scheduled release dates (Section F, Deliverable 20).
b. Develop and enhance systems that comply with:
    1. DoDI 8520.02(Public Key).
    2. DoDI 8500.2 (Information Assurance Implementation).
    3. AFI 33-200 (Information Assurance Management).
    4. DoDI 8510.01 (RMF for DoD IT).
    5. National Institute for Science and Technology (NIST) Special Publication (SP) 800-39 (Managing Information Security Risk, Organization, Mission, and Information System View).
    6. Public Law 111-383.
    7. Defense Information Systems Agency (DISA) Application Security and Development Security Technical Implementation Guide (STIG).

C.5.5 TASK 5 – SYSTEM/SOFTWARE INSTALLATION PLANNING AND IMPLEMENTATION SERVICES

The contractor shall provide recommendations and review installation plans for each system or software delivery to support all aspects of the installation including procedures for verifying that the installation is successful. As part of this task, the contractor shall implement software or system plans, as required by the Government.

The contractor shall acquire and deliver Government-approved HW/SW, incidental to the design and development/enhancement, to support system requirements, development or demonstration of prototypes, or system development/enhancement (testing and prototyping) activities. The contractor shall submit original media Commercial Off-the-Shelf (COTS) Manuals and Supplement data concurrent with each delivery of associated HW/SW (as applicable) (Section F, Deliverable 19).

Upon completion of all installations the contractor shall prepare and deliver an installation report (Section F, Deliverable 31) as described in the software installation plan, similar documentation, or as directed by the Government in a WP. The installation report shall address any problems encountered during installation, procedures for correcting the problems, problems that could not be corrected and their impact on operational use of the system capabilities, a list of the complete site HW/SW inventory, and configuration for the installation.

Unless specified otherwise in the TO, the contractor shall fully support all unique software developed to support integrated solutions on this order. The contractor shall support all software revisions deployed or resident on the system and sub-systems.

C.5.5.1 SUBTASK 1 – INSTALLATION PLANNING

The contractor shall review installation plans for each system or software delivery to support all aspects of the installation including procedures for verifying that the installation is successful (Section F, Deliverable 31). The contractor installation plans shall:

a. Provide directions at a level of detail to enable installation and operation of the system or software with no external assistance.
b. Document hardware configuration requirements, network requirements, startup and shutdown procedures, support software requirements, and procedures for creating database tables and loading the database.
c. Include an inventory that is inclusive of all HW/SW that is either required or to be delivered to support the installation process.
d. Confirm and document that the site has adequate power, space, and cooling to accommodate the installation.

C.5.5.2 SUBTASK 2 – INSTALLATION PLAN IMPLEMENTATION

The contractor shall install software or system, as required by Government WP. Implementation activities may include any or all of the following activities, as applicable, to meet Government requirements:

a. HW/SW Configuration Verification Review: The contractor shall verify that all appropriate manufacturer HW/SW and firmware upgrades have been installed and that all version levels are correct as specified in the installation plan. All verifications shall be

performed no less than 45 days prior to the scheduled installation activities. The FEDSIM COR and AFRL/RIEB TPOC shall be notified of sites that fail to meet the required configuration.

b. Installation Readiness Review: The contractor shall provide technical support for the installation readiness review (typically within 30-days after approval of the results of Government acceptance testing) to ensure that the Government-designated site(s) and all participants are ready for the Accreditation Testing. Areas to be considered during the installation readiness review include:
   1. Availability of software installation media and associated software installation plan.
   2. Availability of physical work space at the Accreditation Site.
   3. Shipment of all material including documentation to the Accreditation Site.
   4. Hardware configuration review to ensure that the site(s) have sufficient hardware and necessary software and architectures in place to support the installation, and availability of personnel at the site(s) to support installation.
   5. Familiarization and testing activities.
   6. IP cut-sheet.
c. Site HW/SW Installation: The contractor shall provide HW/SW installation services at sites specified in WPs. The contractor in support of HW/SW installation shall provide verification of correct/proper HW/SW installation.
d. Post-Installation Services: The contractor shall provide post-installation support (typically within14 consecutive days) at each site designated by the Government in a WP to correct or aid in the resolution of any post-installation system, HW/SW, familiarization, or documentation problems.
e. Installation Report: The contractor shall prepare and deliver an installation report upon completion of each installation as described in the software installation plan, similar documentation, or as directed by the Government in a WP. The Installation Report shall address any problems encountered during installation, procedures for correcting the problems, problems that could not be corrected and their impact on operational use of the system capabilities, a list of the complete site HW/SW inventory, and configuration for the installation (Section F, Deliverable 31).

C.5.6 TASK 6 – IA&A SUPPORT SERVICES

The contractor shall provide IA&A support and test services for customers seeking assistance in obtaining Information System C&A in coordination with and under the authority of AFRL/RIEB ASCA. The contractor shall provide:

a. Independent system risk assessments in support of the RMF (Section F, Deliverables 32 34).
b. Testing and validation services of implemented IA controls (Section F, Deliverable 35).
c. Penetration testing of systems (Section F, Deliverable 25).
d. Assessments of security posture of AF systems (Section F, Deliverable 33).
e. Assistance to programs through the A&A process including transition from the DIACAP to RMF.

f. Assist programs with control interpretation, validation, and scoring (Section F, Deliverable 35).
g. Review and validation of system artifacts (Section F, Deliverable 33).
h. On-site system assessments (Section F, Deliverables 34 and 35).
i. Review and validate mitigation approaches for A&A packages identified by the Information System Security Manager (ISSM) (Section F, Deliverable 33).
j. Security T&E (ST&E) for systems (Section F, Deliverable 24).
k. Analyses of Security Change Notice (SCN) submissions and system changes (Section F, Deliverables 20 and 36).
l. Generate SIA memos (Section F, Deliverable 36).

In support of this task the contractor shall ensure that all system or application deliverables meet the requirements of DoD and AF IA policy. The contractor personnel performing IA activities shall obtain, and remain current with, required technical and/or management certifications.

C.5.7 TASK 7 – IT SYSTEM(S)/SOFTWARE ES

The support provided by the contractor shall cover the entire IT engineering life-cycle including requirements gathering, system design and development, installation, integration and testing, and sustainment (Section F, Deliverable 3).

C.5.7.1 SUBTASK 1 – SYSTEMS ENGINEERING

The contractor shall provide:

a. Life-Cycle Systems Engineering: The contractor shall employ disciplined systems engineering processes through the period of performance of this TO in accordance with AFI 63-1201 (Life-Cycle Systems Engineering) and AFI 63-131 (Modification Program Management), which at a minimum include:
    1. Requirements development.
    2. Technical management and control.
    3. System/software design and architecture.
    4. Integrated risk management.
    5. Configuration management.
    6. Data management and test, evaluation, verification, and validation practices.
b. Systems Engineering Process (SEP): The contractor shall, as set forth in WPs, follow the AF Program Executive Office (AFPEO) Business Enterprise Systems (BES) SEP. The contractor shall develop solutions that employ principles of open technology development and a modular open systems architecture for hardware and software as described in the DoD Open Technology Development Guidebook and Net-Centric Enterprise Solutions for Interoperability (NESI) body of knowledge. The contractor's systems engineering plan and design activities shall also adhere to the DoD Information Sharing and Net-Centric Strategies published by the DoD Chief Information Officer (CIO) and the engineering body of knowledge and lessons learned accumulated in NESI. (Deliverables will be identified in WPs and will align with Section F.3)

C.5.7.2 SUBTASK 2 – ARCHITECTURE AND SYSTEM DESIGN

The contractor shall provide ES for the design, development, and enhancement of systems and applications and their integration into the overarching EA. The contractor shall provide all required design and development documents and supporting architectural documentation, for any frameworks, as identified in the individual WPs (Section F, Deliverable 21).

As part of this task, the contractor shall provide ES for development, enhance, integration, and testing that is needed to successfully complete the Capabilities Integration Environment (CIE) process for IT solutions and standardized DoD target infrastructures. The CIE provides a compliant capability with a set of enterprise services in support of proofs of concept, development, integration, and test activities in an accredited environment.

The contractor shall:

a. Provide all required design, development, and enhancement documents and supporting architectural documentation in compliance with the latest DoD Architectural Framework (DoDAF) EA guidance.
b. Follow and comply with the Global Combat Support System (GCSS) Developer's Guide.
c. Comply with the DoD Mobility Strategy for any systems or applications that have requirements for deployment on mobile technology.

C.5.8 TASK 8 – SYSTEM TESTING SERVICES

The contractor shall provide IT ES to support testing of software developed and/or enhanced under this TO. As part of this task the contractor shall provide support services for the development of a Government T&E Management Plan including roles and responsibilities of all phases of the system:

a. Government Acceptance Testing.
b. Development Testing.
c. Operational Testing.
d. Issuance of CtF and ATO.
e. Interoperability Testing.
f. Integration Testing.
g. IA/Security Testing.
h. Regression Testing.

The contractor shall provide engineering support for system T&E based on the requirements and the technical nature of the design. Requirements of this task may include development of test plans, test documents, test cases, test procedures, test steps, and their allocation to the test events described above.

The contractor shall complete A&A testing and certification testing to verify compliance with current and emerging standards including, as applicable, the following:

a. DoDIIS, Joint DoDIIS/Cryptologic Information Systems Security Standards (JDCSSS).
b. Information Technology Systems Security Risk Management.
c. C&A (IC Directive 503).

d. Security and Privacy Controls for Federal Information Systems and Organizations (National Institute Standards and Technology Special Publication 800-53).
e. SABI.
f. Top SABI (TSABI).
g. DISA.
h. Joint Chiefs of Staff (JCS) policies and requirements of Intelligence Mission Applications and Vulnerability.

Developed test documentation shall support approval to connect to JWICS, NSA Network (NSANET), and SIPRNET and Mission Networks including the AF DCGS Campus Area Network and Wide Area Network (Section F, Deliverables 22, 23, and 24).

The contractor shall provide a logical test process (for all test and test activities) that minimizes interruptions, avoids sustained downtime, and presents a contingency procedure to be implemented in the event of system(s) failure during testing.

C.5.8.1 SUBTASK 1 – REGRESSION TESTING

The contractor shall perform testing at a Government integration environment of the entire system for each upgrade or patch installed to ensure continuing functionality. The Government integration environment will include:

a. Tools.
b. Test suites.
c. Support databases.
d. A software test lab.
e. Configuration management.
f. Hardware spares.
g. Process and procedure documentation and delivered source code.

The contractor shall develop scripts and conduct testing for the application, database, and operating system IAW test plans (Section F, Deliverables 22, 23, 24, and 25). Tests shall comply with the requirements of AFI 99-103, Capabilities Based T&E.

If a test fails, the contractor shall analyze and document test data for each component and rework the system to establish functional equilibrium.

Testing shall be performed to gain Government acceptance and integration; development testing shall ensure operational and technical requirements have been satisfied, and operational testing shall ensure the system meets the needs of the user community. Throughout these test events, the system's Information and Assurance and Interoperability shall be assessed.

C.5.8.2 SUBTASK 2 – PRODUCT/SYSTEM INTEGRATION TESTING

The contractor shall perform testing and inspections of all system services to ensure the technical adequacy and accuracy of all work, including reports and other documents required in support of that work. The contractor shall support on-site testing when requested. When specified by the Government in a WP, the contractor shall participate with the Government in testing the complete system or application at the Government integration environment. After appropriate corrective action has been taken, all tests including those previously completed, related to the

failed test, and corrective action will be repeated and successfully completed prior to Government acceptance (Section F, Deliverable 23).

Pre-cutover audits will consist of verification of all testing completed by the contractor such that the system is deemed ready for functional cutover. As part of this audit, any engineered changes or approved waivers applicable to the installation will be reviewed and agreed upon between the contractor and the Government.

Post-cutover audits will verify that all post-cutover acceptance testing has been performed satisfactorily IAW the standard practices and identify those tests, if any, that have not been successfully completed and must be re-tested prior to acceptance.

C.5.8.3 SUBTASK 3 – OPERATIONAL TESTING (OT)

The contractor shall support operational testing IAW the Government-approved test plan(s) as specified in the individual WP(s). The test plan will consist of a program of tests, inspections, and demonstrations to verify compliance with the requirements of this TO (Section F, Deliverables 27 and 28).

The contractor shall be responsible for implementing changes and/or fixes from deficiencies identified during OT and tracking them until they are resolved.

The contractor shall provide support during system performance testing. The acceptance test will end when the system or application has maintained the site-specific availability rate.

In the event the system or application does not meet the availability rate, the acceptance testing will continue on a day-by-day basis until the availability rate is met.

C.5.8.4 SUBTASK 4 – INTEGRATION AND INTEROPERABILITY TESTING

The contractor shall conduct integration and interoperability testing and provide technical expertise to support system installation; T&E at the site, consisting of the execution of the test and/or operational (system) procedures; and any site specific tests deemed necessary by the site or the Government (Section F, Deliverables 22, 23, and 24).

C.5.8.5 SUBTASK 5 – SECURITY CERTIFICATION/ACCREDITATION AND IA TESTING AND SUPPORT

Depending on client requirements and systems readiness, the contractor shall:

a. Conduct security accreditation and IA testing (Section F, Deliverables 22, 23, and 24).
b. Provide technical expertise to support system security and IA testing (Section F, Deliverables 27 and 33).

This task includes support of all six phases of testing identified in NIST SP 800-39 (Managing Information Security Risk) and NIST SP 800-53 (Security and Privacy Controls for Federal Information Systems and Organizations).

The contractor shall provide system testing and documentation as described in the software accreditation test plan, similar documentation, or as directed by the Government in a WP to meet unique accreditation requirements (Section F, Deliverable 26).

As part of certification testing, the contractor shall provide compliance self-testing and documentation as described in the software accreditation plan, similar documentation, or as directed by the Government in a WP to meet or exceed system certification requirements (Section F, Deliverable 24).

As part of this task the contractor shall provide:

a. Copies of all security related documentation.
b. Explanation and demonstration of test procedures.
c. Resolution of anomalies.
d. Preparation of the security accreditation test report or similar documentation to be loaded into the Government's tracking system (e.g., Xacta).

C.5.9 TASK 9 – FAMILIARIZATION/COACHING SERVICES

The contractor shall conduct system familiarization and course preparation activities at sites designated in Government WP(s). The contractor shall provide Functional User familiarization covering all the functionality of the system. Familiarization shall include all functions available at the user workstations and emphasize those function most often used by different types of users. The totality of the sessions shall be comprehensive and cover all system functionality (Section F, Deliverables 37, 38, 39, and 40).

C.5.10 TASK 10 – ENGINEERING O&M SERVICES

The contractor shall provide engineering support to sustain and operate the ISR system(s) as directed by the Government in WP(s). The contractor shall perform general O&M and administration of data and information components, products, or systems (hereinafter referred to as systems) and include engineering to address O&M problems such as:

a. PRs and CRs.
b. Studies, analyses, and recommendations on modifications, upgrades, and future enhancements and increments.
c. Interoperability, technology, or process improvements.
d. System or architecture obsolescence.
e. Aging system or architecture issues.
f. Upgrades for Joint or Service commonality and interoperability.
g. Sustainment and improvement of system or architecture affordability, reliability, and supportability, while sustaining readiness.
h. Perform logistics support and maintenance activities.

C.5.10.1 SUBTASK 1 – CHANGE AND ENHANCEMENT MANAGEMENT

The contractor shall provide IT ES to make system changes and enhancements that meet emerging user requirements, meet changing operating environments, and resolve problems identified with the system. Requirements for maintenance include:

a. Maintenance of ISR systems, Government Off-the-Shelf (GOTS) and application software from multiple baselines and versions including software on workstations, clients, and servers.

b. Changes to GOTS software will be accomplished by the agency responsible for the software in accordance with its change procedures.

The contractor shall provide central maintenance, consisting of system and engineering support, on-site or remotely from Government facilities to maintain existing operational software by identifying, correcting, testing, and documenting the resolution of software or documentation problems IAW established procedures as described in the Government provided Configuration Management Plan (as applicable), or with site-unique procedures. The contractor shall provide baseline maintenance consisting of maintaining all system and software configurations under the current operational baseline, a site baseline, or a contractor-maintained baseline (Section F, Deliverable 16).

C.5.10.2 SUBTASK 2 – O&M LIFE-CYCLE ACTIVITIES

Requirements of this task include:

a. Request for Change (RFC) Analysis and WPs. The contractor shall (Section F, Deliverable 27):
   1. Develop RFC processes and procedures.
   2. Analyze RFCs and determine system, HW/SW, and documentation impact.
   3. Prepare an RFC solution and submit it to the Government for review and approval.
   4. Implement the Government-approved solution.

b. Analyze, Design Code, Test, Integrate, Deliver, Install, and Verify. After the Government has approved the WP (or equivalent documentation), the contractor shall analyze, design, code, test, integrate, deliver, install, and verify the RFC implementations IAW Government-approved procedures (Section F, Deliverable 27).

c. PRs/CRs. The contractor shall perform the following for PRs and CRs identified by the Government:
   1. The contractor shall provide a PR/CR analysis and WP IAW procedures in the Configuration Management Plan, or other Government or industry defined procedures, within ten days a WP for each PR or CR is received from the Government (Section F, Deliverable 27). The WP will contain at a minimum:
      i. Estimated time to complete.
      ii. Man hours required.
      iii. Identification of software modules affected and estimated lines of code.
      iv. Documentation affected and anticipated number of change pages.
      v. Assessment of impact on the system.
      vi. System performance, security impacts, and scheduled release date.
   2. Upon Government approval of the PR or System PR/CR WP, the contractor shall perform the design, coding, testing, and documenting to achieve the solution to the PR or CR.
   3. The contractor shall provide a monthly report on the status of active PRs and CRs. For each PR or CR, the report shall contain, at a minimum, a list of actions to date and an anticipated implementation date (Section F, Deliverable 3).

d. On-Site Representatives. The contractor shall provide on-call, emergency, on-site O&M of systems designated by the Government WP(s) including after normal site duty hours (Section F, Deliverables 4, 15, 20, and 27). As part of this task the contractor shall:
   1. Identify, analyze, report, and/or resolve problems as directed by the Government in a WP.
   2. Assist site personnel in writing PRs and/or CR.
   3. Provide on-call, emergency site support, as needed, to maintain the operational capability of the Government-designated systems.
   4. Install and test Government-approved HW/SW upgrades to designated systems.
   5. Install operating system and database management system changes for designated systems.
   6. Perform hardware configuration reviews for software releases.
   7. Assist site personnel in maintaining internal system and database management tables and data.
   8. Provide on the job familiarization for site personnel for Government-designated Systems.

e. System Optimization. The contractor shall analyze the operations of a current system based on Government identification of known problem areas. For each identified problem area, the contractor shall develop plans and procedures for collecting data that shall quantify the nature and characteristics of the problem. The contractor shall analyze the data that was collected and provide a report to the Government with alternative methods of providing a solution to the problem. For each alternative presented, the contractor shall identify dollar cost, manpower cost, implementation schedule, and quantifiable measures of improvement (Section F, Deliverable28).